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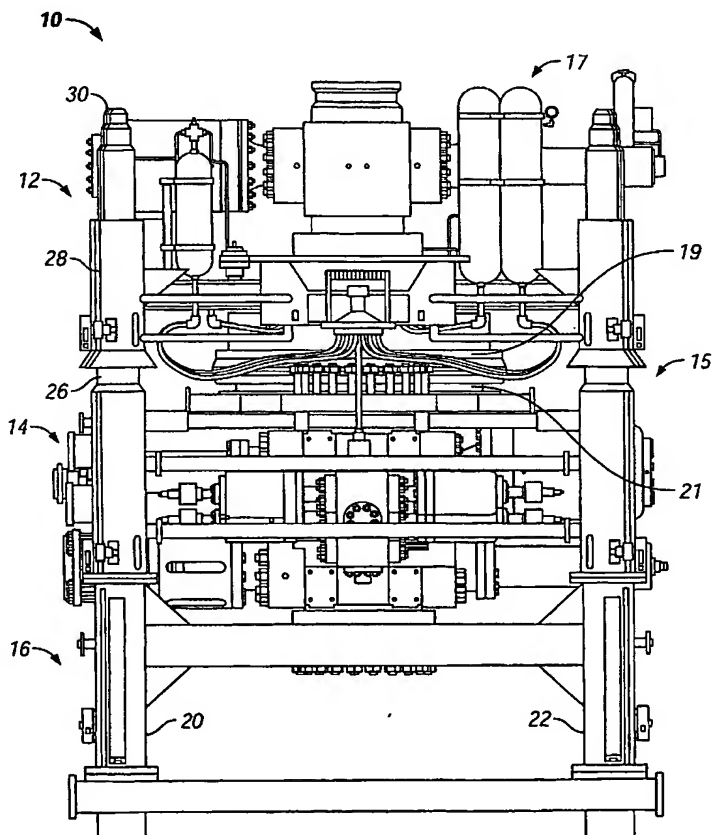
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(54) Title: **LIGHTWEIGHT AND COMPACT SUBSEA INTERVENTION PACKAGE AND METHOD**



(57) Abstract: The present invention discloses apparatus and methods for a lightweight subsea intervention package (10) that may be installed using vessels with a smaller lifting capacity than semi-submersible platforms so that the subsea intervention package (10) can be transported, installed, and removed from a subsea well in less time and with less cost. In one embodiment, the present invention comprises a lower riser package (14) for controlling the subsea well which utilizes two hydraulically activated gate valves (36) (38). An emergency disconnect package (12) is secured to the lower riser package (14) utilizing a disconnect mechanism. The emergency disconnect package (12) is operable to seal the bottom of a riser if the disconnect mechanism is activated to thereby minimize environmental leakage of fluid from the riser.



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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : E21B 29/12, 34/04, 43/01

US CL : 166/340, 351, 361, 363, 364, 365, 368

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 166/340, 351, 361, 363, 364, 365, 368

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,053,252 A (EDWARDS) 25 April 2000 (25.04.2000), see figures 1-5.	1-23
A	US 6,062,312 A (WILKINS) 16 May 2000 (16.05.2000), see all figures.	1-23
A, E	US 6,745,840 B (HEADWORTH) 08 June 2004 (08.06.2004), see whole document.	1-23
A, E	US 6,763,889 B (RYTLESKI et al) 20 June 2004 (20.06.2004), see whole document.	1-23
A	US 6,460,621 A (FENTON et al) 08 October 2002 (08.10.2002), see figures.	1-23

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:	
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